

ROCKY FLATS PLANT
NATIONAL ENVIRONMENTAL POLICY ACT DOCUMENTATION
ENVIRONMENTAL CHECKLIST

1. Date: June 11, 1990
2. Activity/Project Name: OU 2 Surface Water IRA Treatability Study Bench Scale(Indoor)
3. Authorization or EJO #: EC-016-90
4. Project PA: G.Anderson
5. Initiating Line Manager: T.Greengard
6. Project Activity Description (Include justification, location with figures and maps if appropriate, schedule, cost, etc. Use additional pages if necessary):

Based on the Interim Measures/Interim Remedial Action (IM/IRA) for Operable Unit # 2, a bench/vendor scale Treatability Study has to be performed on surface water samples.

A successful surface water treatment has to meet all the Rocky Flats Plant standards. The goal of this bench/vendor-scale study is to determine appropriate treatment process for reduction of organic and radioactive contamination. This study will model in laboratory scale process(es) which in later days will be implemented in the RFP at the Operable Unit #2 for surface

water treatment.

Several possibilities for the surface water treatment will be tested:

- a. Granular Activated Carbon adsorption(GAC) - for the removal efficiencies of the volatile organic compounds;
- b. ion exchange resins and GAC - for removal efficiencies of the plutonium, americium, uranium, gross alpha and beta activity;
- c. test removal of plutonium, americium, uranium, gross alpha and beta activity by chemical coagulation and microfiltration process.

Optimal solidification/stabilization process for the waste stream(s) generated by the preferred surface water treatment technology will be tested.

Treatability study (bench/vendor scale) work plan will be prepared before testing begins. The amount of water which will be removed from the site will be identified in the work plan. All the water samples will be collected from the existing surface water sampling stations (this collection does not require disturbance of the land) and placed in sample

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containers and labeled accordingly.

All the tests required will be identified in the work plan and performed in indoor laboratories. The tests should generate far less than 100 kg of solid wastes containing heavy metals. A daily log will be maintained that records the weights of samples or residues. Hazardous wastes generated during testing will be stored in 90-day satellite stations and then sent to a RCRA - permitted storage area for eventual off-site disposal in a RCRA-approved facility.

Checklist*
YES NO UNKNOWN

- | | |
|---|---|
| 7. Is the project/activity a budget line item? | X |
| 8. Will the project/activity require or potentially require an application for permit or permit modification under: | |
| a. the Clean Air Act | X |
| b. the Clean Water Act | X |
| c. RCRA? | X |
| 9. Does this project involve remedial action under CERCLA? | X |
| 10. Is the project /activity | |
| a. new or | X |
| b. modification, rather than a direct replacement? | X |
| (New or modified activities will generally have more impact than a direct replacement.) | |
| 11. Will the project/activity result in, or have the potential to result in, long term changes to the environment, (e.g., constructing a building, erecting above-ground power lines, a development of new waste ponds or landfills)? | X |

ROCKY FLATS PLANT

NATIONAL ENVIRONMENTAL POLICY ACT NEPA DOCUMENTATION
ENVIRONMENTAL CHECKLIST (CONTINUED)

Checklist*

YES NO UNKNOWN

12. Will the project/activity result in changes and/or disturbances of the following existing factors:

a. noise level		X	
b. air emissions		X	
c. liquid effluent	X		
d. solid waste	X		
e. radioactive waste (including contaminated soil)			X
f. (chemically) hazardous waste	X		
g. mixed waste (radioactive & hazardous)	X		
h. chemical or petroleum product storage	X		
i. water use (withdrawal of ground water or diversion or withdrawal of surface water)	X		
j. drinking water system			X
k. sewage disposal system			X
l. soil movement outside facility fences			X
m. site clearing, excavation, or other alterations			X

EC Prepared by: O. Erlich

Date: June 11, 1990

Organization: ER

Bldg: T130B Extension: 5959

* Clarification of any of these answers should be provided in the Project/Activity Description.